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Shy or sociable?

Introversion/Extraversion and Message Recall

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Shy or sociable?
Introversion/Extraversion and Message Recall

BY

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Thesis

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Abstract

Shy or sociable?

Introversion/Extraversion and Message Recall

by

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The University of Texas at Austin, 2014

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Personality research has long been an area of interest in the study of consumer behavior. Currently, common practice is to segment prospective audiences by demographic variables (age, gender, and race) instead of psychographics (values, attitudes, personality). In this research, the author investigates the relationship between personality type (introversion/extraversion) and message recall. Using 122 undergraduate and graduate students, recall was examined across two forms of stimulus (incongruent and congruent messages). Results indicated that while there is no relationship between personality type and message recall, there is a relationship between the frequency of advertising messaging and recall. Results are discussed individually by messaging frequency and personality type with further suggestions for future research.

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INTRODUCTION

It is common practice for advertising and marketing organizations to do extensive research and testing on potential consumers--eventually dividing them up into demographic segments. While demographics have historically been utilized as the primary component to segmenting target markets, in the 1930s psychographics were used as a way to further segment the target audience. Since then, psychographics have evolved into a more consumer behavior driven metric by studying consumer values, attitudes, interests and lifestyle choices (Gosling & Sandy, 2013). One area of study in psychographics is personality formation (e.g. introversion or extraversion). As modern consumerism becomes increasingly more accessible via digital messaging, it is important to review the impacts psychographics (more specifically personality) have on purchasing behavior such as message recall and retention.

While the impacts of personality type in the social sciences are ever growing and have historical foundation, it is more recently (within the past 30 years) that personality as a medical science has gained footing. For example, studies have shown that introverts are more physiologically sensitive than extraverts—sweating more in reaction to stimuli such as noise and emotion (Geen, 1984) as well as salivating more in response to lemon juice on their

tongue (Funder, 2010). Through this research, there is a better understanding of the key neurological chemical differences in the makeup of the brain between extraverts and introverts. That is, research suggests that introverts are more sensitive to dopamine, the chemical commonly associated with rewards & happiness, is a common factor. Extraverts on the other hand are less sensitive and require more of the chemical makeup to achieve the same threshold (Depue & Collins, 1999). Other studies have found cortical neurons of introverts and extraverts may respond differently to the neurotransmitter chemicals such gamma-aminobutyric acid (GABA) (which is known to help in regulating neuronal excitability) and N-methyl D-aspartate (NMDA) (the predominant molecular device for controlling memory function).

Additionally, Buckner (2012) found that people who identify as introverts tend to have larger and thicker gray matter in certain areas of the prefrontal cortex, a highly complex brain region associated with abstract thought and decision-making. People who identify as strongly extraverted, on the other hand, tend to have thinner gray matter in those same prefrontal areas—which hints that introverts tend to devote more neural resources to abstract pondering, while extraverts tend to live in the moment (Buckner, 2012). These implications, when applied to advertising and marketing beg to question if there is a significant difference in the way extraverts and introverts interpret

and recall advertisements based on their cognitive engagement of the messages. If in fact introverts devote more resources to abstract pondering and require less physiologically input to achieve the same response threshold as an extrovert, what impact might that have on how personality type (in general) affects message recall?

The variables in this study—extroversion, introversion and message congruency all share one common characteristic in that they refer to objective aspects of the advertisements or participants. By removing ad hoc and self-reported measurements this study becomes about what the congenital relationship between the two are and to which degree they are predictive measurements both in isolation and in combination. However first these variables must be appropriately defined for the purpose of this research.

LITERATURE REVIEW

PSYCHOGRAPHICS

In the early 1930s marketers began to recognize consumers' growing desire for variety in their purchases and an increase in the complexity of their needs and desires (Smith, 1956). This, along with other production, consumption and economic changes drove manufacturers and businesses to segment the broader consumer audience into smaller, more succinct groups (Smith, 1956). Such developed provided the groundwork for a new field within market segmentation--psychographics. The term "psychographics" was established by Demby in 1965 with the idea of marrying demographic segmentation with consumers' thoughts and actions (Demby, 1994). Originally, psychographical segmentation was heavily routed in personality profiling (Gosling & Sandy, 2013). One of the most common personality inventories is the Edward's Personal Preference Schedule (PPS) (Edwards, 1959). The PPS was designed to rate individuals in fifteen normal needs or motives. While psychographics at the time were revolutionary in consumer purchasing behavior, attempts at successfully predicting purchasing behavior were largely unsuccessful (Wells, 1975). Previous research suggests that psychographics (specifically personality) is better at predicting aggregated behaviors than specific behaviors as personality is found to be congruent over

time, but may fluctuate across situations (Barrick & Mount, 2005; Fleeson, 2001). However, Gosling (2013) suggests that introversion and extraversion are superior in predicting certain behaviors such as conservative political behaviors, recycle/sustainable purchases, type of television viewed (crime shows and political shows) and traditional entertainment decisions (Gosling & Sandy, 2013).

Criticisms of utilizing psychographics as a predictive behavior suggest that one of the major issues is that the measures were created for a clinical context and not large-scale personality assessments. For example, the Edwards (1959) Personality Preference Schedule (PPS) was validated for personal counseling (Wells, 1975). That said, when not using the personality measurements developed for a clinical context, marketers favored ad hoc (rather than establish) measurements (Gosling & Sandy, 2013) to estimate the impacts of psychographics. However, ad hoc scales generally do not have the same validity of the established, more clinical scales and are often administered and developed by nonpsychologists who were not trained in psychometrics (Gosling & Sandy, 2013).

PERSONALITY TYPE

While there is no universal definition of "personality" in psychographical research, in the 1930's Gordon Allport popularized the idea of nomothetic

(group-based methodology) and idiographic (individual-based methodology) psychology (Allport, 1937). Examples of popular nomothetic theories are Carl Jung's Psychological Types (Jung, 1971), Eysenck's three-factor Model (Eysenck, 1967), "The Big Five" (Costa & McCrae, 1992) and Myers-Briggs' Type Indicator (Myers, 1962). For this study, the Myers-Briggs was utilized as it provided a clear dichotomy and validation for introversion and extraversion in participants.

The Myers-Briggs Type Indicator (MBTI) (Myers, 1962) was developed by mother-daughter duo Katherine C. Briggs and Isabell Briggs Myers and designed to measure four dimensions of personal preference: Introversion (I) versus Extraversion (E), Sensing (S) versus Intuition (N), Thinking (T) versus Feeling (F) and Perceiving (P) versus Judging (J). The MBTI is a self-report inventory developed to measure personality variables associated with the Jungian psychological typology. It is commonly used in various fields of study such as the social sciences, education, counseling, etc.

When scoring the MBTI, raw scores are computed for each dimension, which are the sum of the scale values for each chosen response alternative (alternatives are given a value of 1 or 2). Next, a preference score is computed for each of the four MBTI dimensions (Harvey, 1994). To assign the four dimensions the direction of the net preference establishes the pole to which a

person is assigned (e.g., Introvert OR Extravert, Sensing OR Intuition, Thinking OR Feeling, Perceiving OR Judging). In total, there are sixteen different 4-letter personality profiles (e.g., ESFJ, INTP, ENFP, ISFJ, etc.) (Myers, 1962).

ISTJ 1. Sensing 2. Thinking 3. Feeling 4. Intuition	ISFJ 1. Sensing 2. Feeling 3. Thinking 4. Intuition	INFJ 1. Intuition 2. Feeling 3. Thinking 4. Sensing	INTJ 1. Intuition 2. Thinking 3. Feeling 4. Sensing
ISTP 1. Thinking 2. Sensing 3. Intuition 4. Feeling	ISFP 1. Feeling 2. Sensing 3. Intuition 4. Thinking	INFP 1. Feeling 2. Intuition 3. Sensing 4. Thinking	INTP 1. Thinking 2. Intuition 3. Sensing 4. Feeling
ESTP 1. Sensing 2. Thinking 3. Feeling 4. Intuition	ESFP 1. Sensing 2. Feeling 3. Thinking 4. Intuition	ENFP 1. Intuition 2. Feeling 3. Thinking 4. Sensing	ENTP 1. Intuition 2. Thinking 3. Feeling 4. Sensing
ESTJ 1. Thinking 2. Sensing 3. Intuition 4. Feeling	ESFJ 1. Feeling 2. Sensing 3. Intuition 4. Thinking	ENFJ 1. Feeling 2. Intuition 3. Sensing 4. Thinking	ENTJ 1. Thinking 2. Intuition 3. Sensing 4. Feeling

Figure 1: Myers-Briggs Personality Types

Scores on the extroversion scale correlate with social adjustment, leadership, assertiveness, gregariousness, desire for affiliation and affection and altruism. Scores on the introversion scale are attached to reflective observation, autonomy, and interest in privacy. Scores on the sensing scale correlate with measures of practical outlook and occupations relating to economic gain while scores on the intuitive scale have significant correlations

with measures of flexibility, artistic sensitivity, independence, inner-directedness, and liking to use the mind. Scores on the thinking scale have correlations with measures of dominance, abstract conceptualization, assertiveness, achievement, and aggression. Scores on the feeling scale correlate with measures of concern for others, nurturance, sociability, deference, blame avoidance, and creative occupations in the arts and humanities. Scores on the perceptive scale correlate with measures of complexity, flexibility, autonomy, succorance, and imagination, while scores on the judging scale have significant correlations with measures of order, self-control, achievement, leadership, and endurance (Briggs-Myers & McCaulley, 1986).

According to the theory of conditional reasoning, the reasoning process is highly dependent on personality type and how the stimuli or events are framed differently across the population (James & McIntyre, 2000). Some studies have also pointed out that learning styles and information processing vary by MBTI personality profile. For instance, Busato et al., (1999) reported that extraverted students were more achievement-oriented and preferred meaning-, reproduction-, and application-directed learning styles. In contrast, students high on introversion had low achievement motivation, exhibited an undirected learning style, and had difficulty in identifying and processing

important material (Busato, Prins, Elshout, & Hamaker, 1999). For this study, only extraversion and introversion were considered as these are often referred to as the first and most dominant factor for learning activities (Bayne, 2004). Learning activities as well as personality type (Introversion/Extraversion) have had a long history in consumer behavior, however the relationship between consumer behavior and purchasing have yet to be fully developed. For instance, now consumers can cognitively engage with a product which can effect the relationships a consumer has with the brand or product. Therefore, this study aims to utilize a nomothetic personality inventory (Myers-Briggs) to extend the reach of personality type (introversion/extraversion) to cognitive product engagement.

COGNITIVE ENGAGEMENT

Increasing brand awareness and consumer engagement is amongst the most important and lucrative goals of advertisers. It is often assumed that the number of consumers exposed to an advertisement is equal to the number of consumers that have attended to or cognitively engaged with that advertisement. However, social scientists believe the task of attending to and processing the information of an advertisement is based on limited cognitive capacity (Lang, 2000). This Limited-Capacity Model holds two major assumptions: 1. consumers are inherently information processors and 2.

consumers have a limited amount of neural resources that can be allocated to information processing. The model consists of three sub-processes (encoding, storage and retrieval) which occur simultaneously.

Encoding of information is determined by the number of resources allocated to the cognitive process. For example, if a person is exposed to a stimulus and they actively choose to cognitively engage then the brain creates an orienting response (OR) which is a cognitive response to the information (Lang, 2000). These cognitive responses can be automatic (information processed subconsciously) or controlled (messages that are proactively attended to) with each uniquely predicting recall. In either event, the next step in cognitive engagement is to move information into storage.

This idea of storage is the process of linking the newly encoded information to previously encoded information. The more a consumer cognitively engages with a new piece of information the longer this information is stored (Lang, 2000). While certain parts of the newly encoded information are more thoroughly stored than others (long-term memory versus short-term memory) in either case the final subprocess is retrieval.

Retrieval is the process of reactivating a cognitive representation of a message. While the model explains message retention as a linear process, retrieval is an ongoing process. Lang (2000) explains that messages may

activate or retrieve relevant previously stored knowledge from long-term memory as we receive messages in order to comprehend and store them.

Although much of the empirical evidence supporting the limited capacity model has been focused on television as the medium, it finds application in other media based on some important criteria such as predicting fairly high automatic allocation of resources to encoding with fairly good encoding if cognitive load is low, and poor encoding if cognition load is high (Lang, 2000). The web medium compared to static ads, will impose a higher cognitive load on the user by eliciting stronger orienting responses, thereby triggering greater disbursement of attentional resources for encoding messages featured on the site (Heo & Sundar, 2001; Lang et al. 2002).

Furthermore, many studies support a positive relationship between congruency in messaging. Examinations have focused on spokesperson–advertised product congruity (Kamins 1990; Lynch and Schuler 1994; Solomon, Ashmore, and Longo 1992), advertisement music–advertised product congruity (Hung 2000; Kellaris, Cox, and Cox 1993), advertisement picture--advertisement text congruity (Areni and Cox 1994; Houston, Childers, and Heckler 1987), congruity between involvement types of advertisement and television program (Sharma 2000), an individual's mood–advertisement content congruency (Howard and Barry 1994; Kamins, Marks, and Skinner

1991; Lord, Burnkrant, and Unnava 2001), and program context–advertised product congruity (Bello, Pitts, and Etzel 1983; De Pelsmacker, Geuens, and Anckaert 2002; Furnham, Gunter, and Richardson 2002; Furnham, Gunter, and Walsh 1998; Horn and McEwen 1977). Furthermore, Aaker and Brown (1972) found a significant effect of style congruency on print advertising effectiveness. The importance of message congruency partnered with the disbursement of cognitive resources leads us to propose the following two hypothesis:

H1: Viewing multiple incongruent advertisements will decrease brand recall compared to multiple congruent advertisements.

H2: Viewing multiple incongruent advertisements will decrease product recall compared to multiple congruent advertisements.

Lastly, as Lang (2000) discusses the importance of cognitive engagement in the limited capacity model and cognitive engagement is a significant factor in personality type, a research question will be explored:

RQ1: Does personality-type (i.e., introversion/extraversion) interact with advertisement load (i.e., multiple congruent and incongruent advertisements) for recall?

More specifically, an explanation will be sought that investigates the relationship between introversion/extraversion and cognitive engagement with message recall as the dependent variable.

METHODS

The research setting for this study was a large public university in Texas with 122 undergraduate and graduate students serving as participants. A convenience sample was deemed appropriate for the purposes of this research as college students are a population with a naturally occurring variation in personality type. Of those who participated in the survey 59% were female, 41% were male; 17% were ages 18-20 years, 61% were ages 21-24 years, 16% were ages 25-28 years and 6% were above the age of 29. Further, the sample consisted of: 69% Non-Hispanic White, 19% Latino or Hispanic American, 10% Asian American, 3% African American, 3% Indian American, 2% Native American, 2% "Other"; 72% undergraduate and 28% graduate students.

PROCEDURES & DESIGN

Approval to conduct this research was secured from the researchers home university Institutional Review Board. Participants were offered extra credit for their participation and an alternative form of extra credit was offered for those who chose not to participate. Once participants consented, they were randomly assigned to one of two messaging stimuli to be viewed for 5 seconds. Immediately after the message had been viewed, participants were asked to participate in a survey which included a short-form version of the MBTI (specific to introversion/extraversion) and demographic information.

The current study employed a 2 (Introversion/Extraversion) x 2 (Congruent Message/Incongruent Message) between-subjects experimental design. The introversion (I) extroversion (E) manipulation was developed from the MBTI (Briggs-Meyers & McCaulley, 1986). An extravert (E) draws energy from the outside world of people, whereas Introverts (I) draw energy from within themselves. However, the personality tendencies are not rigid. Introverts can be outgoing and talkative when required; extroverts can be quiet and subdued when needed (Lowenthal, 1994). Level of intro- or extroversion was defined by calculating subjects' answers to the ten questions from the MBTI that are indicative of the introversion/extroversion personality type (e.g. At a party do you: a. Interact with many, including strangers or, b. Interact with a few, known to you). Respondents with a total score between 10-14 were classified as extravert, while respondents with a cumulative score between 16-20 were classified as introvert. Respondents with a sum of 15 were classified based on the pole with the majority of answers (e.g. majority of answers 'a' classified as extravert, majority of answers 'b' were classified as introvert) ($M = 14.74$, $SD = 2.74$). Once the respondents were classified as either introvert or extrovert, the scale was converted to reflect the "extraverted" (Score = 1), and "introverted" (score = 2) ($M = 1.49$, $SD = .49$).

For the message congruency manipulation, participants were randomly assigned to one of two messages defined as congruent or incongruent. The incongruent message stimulus featured an AOL homepage with a top banner of a Discover Credit Cards advertisement and a side banner of an advertisement for Pediatric Advil (Appendix 1). The congruent message stimulus also featured an AOL homepage, however, both the top and side banners were of a Discover Credit Card advertisement (Figure 2).

DEPENDENT MEASURES

Measures taken during this study include two dependent measures – brand and product recall.

Brand Recall was calculated as the sum of all correct responses for incongruent and congruent message types ($M = .34$, $SD = .477$).

Product Recall was calculated as the sum of all correct responses for incongruent and congruent message types ($M = .38$, $SD = .488$).

RESULTS

Addressing H_1 , data indicate that processing multiple incongruent advertisements ($F(1,79) = 10.57, p < .05, M = .16, SD = .37$) decreases brand recall compared to multiple congruent advertisements ($M = .50, SD = .51$). Additionally, results indicate the same decline in product recall ($F(1,79) = 15.99, p < .05$). That is, product recall is decreased when multiple incongruent advertisements are presented ($M = .16, SD = .37$) compared to multiple congruent advertisements ($M = .57, SD = .51$), thus, supporting H_2 . In regards to RQ1, data suggests that personality type does not interact with brand ($F(1,79) = .01, p > .05$; introverts-incongruent $M = .15, SD = .36$; introverts-congruent $M = .47, SD = .51$; extroverts-incongruent $M = .17, SD = .39$; extroverts-congruent $M = .52, SD = .51$) or product recall ($F(1,79) = .04, p > .05$; introverts-incongruent $M = .15, SD = .36$; introverts-congruent $M = .57, SD = .50$; extroverts-incongruent $M = .17, SD = .39$; extroverts-congruent $M = .56, SD = .50$).

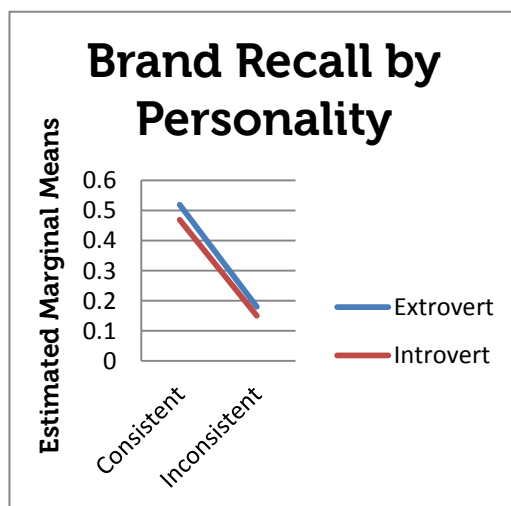


Figure 2: Brand Recall by Personality

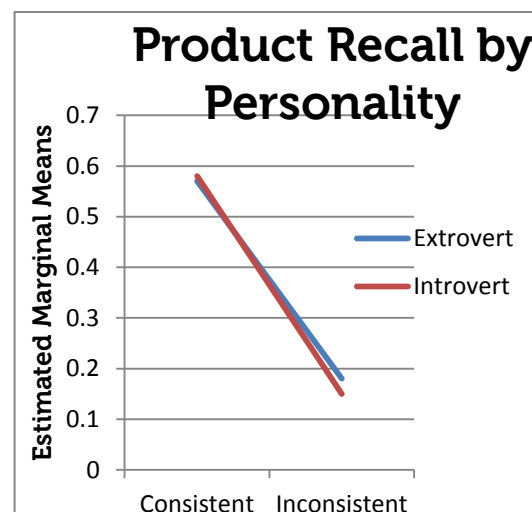


Figure 3: Product Recall by Personality

DISCUSSION

Consistent with previous research findings on information processing, the present results demonstrated that when multiple incongruent messaging were present, recall decreases. A potential influence of these research findings is that a high-involvement product (like Discover Credit Cards) is more appealing when advertised using a banner ad with a photograph of the product, while low-involvement products are more appealing when advertised using text-only (Floresa, Chen, Jeng-Chung, & Ross, 2014). In the current research, a Discover Credit Card advertisement was used as the primary stimulus of both incongruent and congruent advertisements. The incongruent advertisement stimulus was partnered with Advil for children from an AOL homepage. In terms of congruency, products generally are more appealing and provide better recall in cases where the product and websites are highly congruent, where the product is similar to the web site theme (e.g., a new book advertised on a book retailer's web site) (Floresa, Chen, Jeng-Chung, & Ross, 2014). Furthermore, this study did not accommodate for changes in message attentiveness based on gender. Recent research shows that males show greater attention toward graphical stimuli such as banner advertisements, and indicate more favorable attitudes to advertisements on the left side of the page, while females indicate more favorable attitudes to

advertisements on the right side of the page (Goodrich, 2014). However, when discussing introversion/extraversion there is no gender differential as these personality traits hold stagnant over time (Bayne, 2004). Based on these two findings, gender influences the processing of online messaging however is independent from personality type. This provides an opportunity for future research to investigate the impact gender and personality type together have on message recall.

Lastly, research on online advertising states “the mode a web user is in has a large impact on advertising recall and recognition. Those in a goal-directed mode are much less likely to remember banner advertisements than those surfing the site” (Danaher & Mullarkey, 2003) p. 263. For the purposes of this study, advertisements were located at the top and on the right side of the page. It could be argued that respondents completed the task in a ‘goal-directed mode’ with the intention of finishing the study. This (as well as the lack of distinction in gender and location of the advertisement) could potentially account for the limited amount of recall from both the congruent and incongruent stimuli.

Based on these results there is also an area of opportunity for future research to further investigate the relationship among the full MBTI Type Indicator (the four dichotomies), messaging recall and gender. While gender

and personality type are distinct, online message recall research proposes there are significant differences between genders and how information processed.

Conclusively, this study suggests a reevaluation of standard information processing models as it applies to the changing population. Participants in this study (Gen Y) represent the first generations to fully grow up with new technology; spending their entire lives surrounded by computers, videogames, cell phones and online advertisements (Prensky, Digital Natives, Digital Immigrants , 2001). Per Lang's study, the Limited Capacity Model predicts "poor encoding if cognition load is high", however Prensky asserts, "today's students think and process information fundamentally different from their predecessors" (p.1). Based in recent research advancements in neurobiology, the brain is now believed to be much more flexible (a phenomenon known as neuroplasticity) (Prensky, Digital Natives, Digital Immigrants, Part II: Do They Really Think Differently?, 2001) than it once was, and continues to evolve our entire lives. Dr. Bruce D. Berry, Baylor College of Medicine is quoted in Prensky's article as saying: "Different kinds of experiences lead to different brain structures" which is further evidence that online advertising, Gen Y and the way information is processed is changing. The advancements in media technologies have enhanced many skills (parallel information processing,

graphic awareness and random access (Winn, 1997)), which leaves opportunity for information processing methods to be revisited and reevaluated for future consumers.

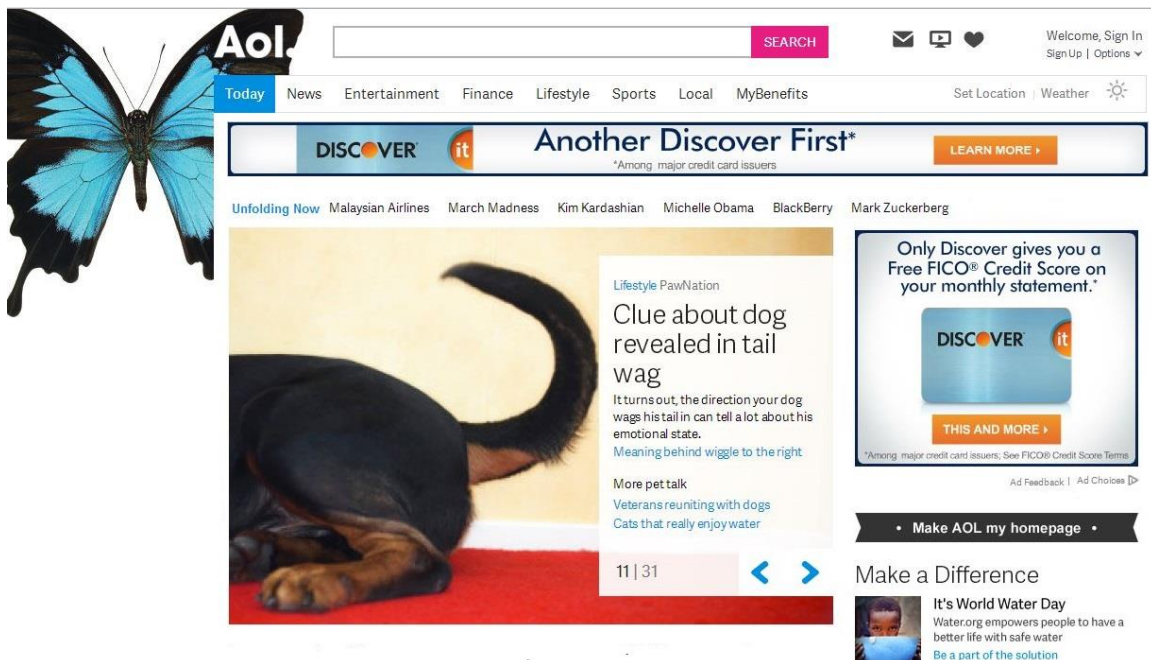
LIMITATIONS AND FUTURE DIRECTIONS

There are several limitations of the present study. First, the study was limited to undergraduate and graduate students at a single public university. Second, the sample size was modest and did not permit disaggregated analysis by other personal factors such as gender. Additionally, the participants were students seeking extra credit for completing the inventory, and we do not know if the findings are generalizable to the broader population.

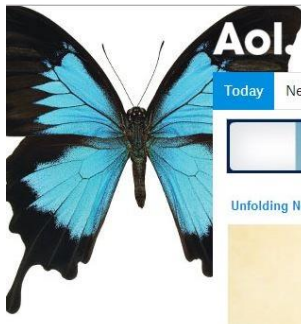
Further research is needed to verify, clarify, and further implicate the present results. This study did not accommodate for the shift in accessibility of the survey. Research suggested a 5-second timeframe would be adequate in returning unadulterated recall. However, this time frame does not allow for scrolling or maneuvering if the survey was being completed on a mobile device. Additionally, research suggests that larger screen displays increase attention and arousal (Reeves, Lang, Kim, & Tatar, 1999), which depending on the device utilized by the participant could influence the recall assessment. Future research should be conducted (potentially via neuromarketing) to see if standard information processing models and time frames hold true to varying messaging vehicles. If not, it may be necessary to adjust the time frame (5 seconds) to accommodate for the mode in which the survey is being

administered. If all things remained equal, the dichotomy between the varying brands (Discover and Advil) in this study make it impossible to measure participants' previous exposure or context and the implications it may have had on message recall. All things aside, the relationship between message recall and personality type clearly offers many challenges and opportunities for research yet to be addressed.

APPENDICES



Appendix 1: Congruent Message Stimuli



Aol.

SEARCH

Welcome, Sign In
Sign Up | Options


Today News Entertainment Finance Lifestyle Sports Local MyBenefits Set Location Weather

DISCOVER it Another Discover First*
*Among major credit card issuers [LEARN MORE](#)


Unfolding Now Malaysian Airlines March Madness Kim Kardashian Michelle Obama BlackBerry Mark Zuckerberg

Lifestyle PawNation
Clue about dog revealed in tail wag
It turns out, the direction your dog wags his tail in can tell a lot about his emotional state.
[Meaning behind wiggle to the right](#)
More pet talk
[Veterans reuniting with dogs](#)
[Cats that really enjoy water](#)

11 | 31

TRY TODAY. SAVE \$1
With the medicine pediatricians use most for their own children's fever*

*Based on a survey of doctors Use as directed
[Ad Feedback](#) | [Ad Choices](#)

• Make AOL my homepage •

Make a Difference
 **It's World Water Day**
Water.org empowers people to have a better life with safe water
[Be a part of the solution](#)

Appendix 2: Incongruent Message Stimuli

MBTI Personality Type Test

1. At a party do you:

- a. Interact with many, including strangers
- b. Interact with a few, known to you

8. At parties do you:

- a. Stay late, with increasing energy
- b. Leave early with decreased energy

15. In your social groups do you:

- a. Keep abreast of other's happenings
- b. Get behind on the news

22. In phoning do you:

- a. Rarely question that it will all be said
- b. Rehearse what you'll say

29. In company do you:

- a. initiate conversation
- b. wait to be approached

36. Does new and non-routine interaction with others:

- a. stimulate and energize you
- b. tax your reserves

43. Do you prefer:

- a. many friends with brief contact
- b. a few friends with more lengthy contact

50. Do you:

- a. speak easily and at length with strangers
- b. find little to say to strangers

57. When the phone rings do you:

- a. hasten to get to it first
- b. hope someone else will answer

64. Are you more inclined to be:

- a. easy to approach
- b. somewhat reserved

Appendix 3: Myers-Briggs Short Form Questionnaire

Scoring

Col 1			Col 2			Col 3			Col 4			Col 5			Col 6			Col 7		
A	B		A	B		A	B		A	B		A	B		A	B		A	B	
1			2			3			4			5			6			7		
8			9			10			11			12			13			14		
15			16			17			18			19			20			21		
22			23			24			25			26			27			28		
29			30			31			32			33			34			35		
36			37			38			39			40			41			42		
43			44			45			46			47			48			49		
50			51			52			53			54			55			56		
57			58			59			60			61			62			63		
64			65			66			67			68			69			70		
Copy to →			Copy to →			Copy to →			Copy to →			Copy to →			Copy to →			Copy to →		

E			I			S			N			T			F			J			P		
---	--	--	---	--	--	---	--	--	---	--	--	---	--	--	---	--	--	---	--	--	---	--	--

Appendix 4: Myers-Briggs Short Form Scoring

Appendix 5: Survey



Default Question Block

Identification of Investigator and Purpose of Study

You are invited to participate in a research study on Internet content. The study is being conducted by a team of researchers at The University of Texas at Austin, Department of Advertising & Public Relations.

Your participation will contribute to a better understanding of how people use online information. You are free to contact the investigator at the address and phone number listed below to discuss the study. You must be at least 18 years old to participate.

If you agree to participate:

- You will be asked to schedule a time to complete a short survey and view an online message. In total, these activities will take approximately 20-25 minutes of your time.

Risks/Discomfort

There are no anticipated risks or discomforts from taking part in this survey greater than those associated with everyday media consumption. If at any time during this study you would like to end your participation, you may do so with no penalty and you will still be able to receive credit for participating in research.

Benefits/Compensation

There will be no cost for participating in this research. Upon completion of the second phase of this study, you will be given extra credit for completing the study. If you would like to receive credit but do not want to participate in this study, please talk to your instructor about completing the alternative assignment. The alternative assignment should be equivalent in time and effort that would be needed to participate in this study. There is no direct benefit for participating in this study.

Confidentiality

All data obtained from participants will be kept confidential and will only be reported in an aggregate format (by reporting only combined results and never reporting individual ones). All questionnaires will be concealed on a password protected computer and only the primary investigator and assistant researcher listed below will have access to them. Contact information will only be collected for purposes of giving the participant research credit and will remain separate from participant responses. All contact information will be destroyed at the end of the study.

Participation

Participation in this research study is completely voluntary. You have the right to withdraw at any time. If you desire to withdraw, your responses will be reviewed and may be accepted or rejected at the researchers' discretion. Withdrawal will not affect your relationship with The University of Texas in anyway.

Questions about the Research

If you have any questions about the study, you may contact the researchers:

Dr. Matthew Eastin	Alana Dvorak	Office of Research Support
Belo Center for New Media (BMC)	Belo Center for New Media (BMC)	Peter T. Flawn Academic Center (FAC)
300 West Dean Keeton, A1200	300 West Dean Keeton, A1200	2400 Inner Campus Dr., Suite 426
Austin, TX 78712	Austin, TX 78712	Austin, TX 78712
(512) 471-1101	(512) 471-1101	(512) 471-8871
matt.eastin@mail.utexas.edu	alana.m.dvorak@gmail.com	orsc@uts.cc.utexas.edu

Appendix 5: Survey (CONT.)

Your willingness to participate in this research study is implied if you click the link below to proceed with completing this survey.

☐ Yes, I agree to participate

Pick three of the words listed below to best describe how you're currently feeling:

- | | | | | |
|--|--------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> down-to-earth | <input type="checkbox"/> sentimental | <input type="checkbox"/> imaginative | <input type="checkbox"/> intelligent | <input type="checkbox"/> good looking |
| <input type="checkbox"/> family-oriented | <input type="checkbox"/> friendly | <input type="checkbox"/> unique | <input type="checkbox"/> technical | <input type="checkbox"/> charming |
| <input type="checkbox"/> small-town | <input type="checkbox"/> daring | <input type="checkbox"/> up-to-date | <input type="checkbox"/> corporate | <input type="checkbox"/> feminine |
| <input type="checkbox"/> honest | <input type="checkbox"/> trendy | <input type="checkbox"/> independent | <input type="checkbox"/> successful | <input type="checkbox"/> smooth |
| <input type="checkbox"/> sincere | <input type="checkbox"/> exciting | <input type="checkbox"/> contemporary | <input type="checkbox"/> leader | <input type="checkbox"/> outdoorsy |
| <input type="checkbox"/> real | <input type="checkbox"/> spirited | <input type="checkbox"/> reliable | <input type="checkbox"/> confident | <input type="checkbox"/> masculine |
| <input type="checkbox"/> wholesome | <input type="checkbox"/> cool | <input type="checkbox"/> hard-working | <input type="checkbox"/> upper-class | <input type="checkbox"/> tough |
| <input type="checkbox"/> original | <input type="checkbox"/> young | <input type="checkbox"/> secure | <input type="checkbox"/> glamorous | <input type="checkbox"/> rugged |
| <input type="checkbox"/> cheerful | | | | |

Pick three of the words listed below to best describe your personality:

- | | | | | |
|--|--------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> down-to-earth | <input type="checkbox"/> sentimental | <input type="checkbox"/> imaginative | <input type="checkbox"/> intelligent | <input type="checkbox"/> good looking |
| <input type="checkbox"/> family-oriented | <input type="checkbox"/> friendly | <input type="checkbox"/> unique | <input type="checkbox"/> technical | <input type="checkbox"/> charming |
| <input type="checkbox"/> small-town | <input type="checkbox"/> daring | <input type="checkbox"/> up-to-date | <input type="checkbox"/> corporate | <input type="checkbox"/> feminine |
| <input type="checkbox"/> honest | <input type="checkbox"/> trendy | <input type="checkbox"/> independent | <input type="checkbox"/> successful | <input type="checkbox"/> smooth |
| <input type="checkbox"/> sincere | <input type="checkbox"/> exciting | <input type="checkbox"/> contemporary | <input type="checkbox"/> leader | <input type="checkbox"/> outdoorsy |
| <input type="checkbox"/> real | <input type="checkbox"/> spirited | <input type="checkbox"/> reliable | <input type="checkbox"/> confident | <input type="checkbox"/> masculine |
| <input type="checkbox"/> wholesome | <input type="checkbox"/> cool | <input type="checkbox"/> hard-working | <input type="checkbox"/> upper-class | <input type="checkbox"/> tough |
| <input type="checkbox"/> original | <input type="checkbox"/> young | <input type="checkbox"/> secure | <input type="checkbox"/> glamorous | <input type="checkbox"/> rugged |
| <input type="checkbox"/> cheerful | | | | |

On the following page you will get five seconds to review a home page and its advertisements. After five seconds the survey will automatically take you to the next question. When you are ready, please acknowledge and press the next button.

☐ I understand

Appendix 5: Survey (CONT.)

Post Questions

Enter the brand name or names in the advertisements.

What product or products were the advertisements for?

Of the **brand** you remember the most, pick three of the words listed below to best describe your perception of the brand:

- | | | | | |
|--|--------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> down-to-earth | <input type="checkbox"/> sentimental | <input type="checkbox"/> imaginative | <input type="checkbox"/> intelligent | <input type="checkbox"/> good looking |
| <input type="checkbox"/> family-oriented | <input type="checkbox"/> friendly | <input type="checkbox"/> unique | <input type="checkbox"/> technical | <input type="checkbox"/> charming |
| <input type="checkbox"/> small-town | <input type="checkbox"/> daring | <input type="checkbox"/> up-to-date | <input type="checkbox"/> corporate | <input type="checkbox"/> feminine |
| <input type="checkbox"/> honest | <input type="checkbox"/> trendy | <input type="checkbox"/> independent | <input type="checkbox"/> successful | <input type="checkbox"/> smooth |
| <input type="checkbox"/> sincere | <input type="checkbox"/> exciting | <input type="checkbox"/> contemporary | <input type="checkbox"/> leader | <input type="checkbox"/> outdoorsy |
| <input type="checkbox"/> real | <input type="checkbox"/> spirited | <input type="checkbox"/> reliable | <input type="checkbox"/> confident | <input type="checkbox"/> masculine |
| <input type="checkbox"/> wholesome | <input type="checkbox"/> cool | <input type="checkbox"/> hard-working | <input type="checkbox"/> upper-class | <input type="checkbox"/> tough |
| <input type="checkbox"/> original | <input type="checkbox"/> young | <input type="checkbox"/> secure | <input type="checkbox"/> glamorous | <input type="checkbox"/> rugged |
| <input type="checkbox"/> cheerful | | | | |

Of the **product/s** you remember the most, pick three of the words listed below to best describe your perception of the product:

- | | | | | |
|--|--------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> down-to-earth | <input type="checkbox"/> sentimental | <input type="checkbox"/> imaginative | <input type="checkbox"/> intelligent | <input type="checkbox"/> good looking |
| <input type="checkbox"/> family-oriented | <input type="checkbox"/> friendly | <input type="checkbox"/> unique | <input type="checkbox"/> technical | <input type="checkbox"/> charming |
| <input type="checkbox"/> small-town | <input type="checkbox"/> daring | <input type="checkbox"/> up-to-date | <input type="checkbox"/> corporate | <input type="checkbox"/> feminine |
| <input type="checkbox"/> honest | <input type="checkbox"/> trendy | <input type="checkbox"/> independent | <input type="checkbox"/> successful | <input type="checkbox"/> smooth |
| <input type="checkbox"/> sincere | <input type="checkbox"/> exciting | <input type="checkbox"/> contemporary | <input type="checkbox"/> leader | <input type="checkbox"/> outdoorsy |
| <input type="checkbox"/> real | <input type="checkbox"/> spirited | <input type="checkbox"/> reliable | <input type="checkbox"/> confident | <input type="checkbox"/> masculine |
| <input type="checkbox"/> wholesome | <input type="checkbox"/> cool | <input type="checkbox"/> hard-working | <input type="checkbox"/> upper-class | <input type="checkbox"/> tough |
| <input type="checkbox"/> original | <input type="checkbox"/> young | <input type="checkbox"/> secure | <input type="checkbox"/> glamorous | <input type="checkbox"/> rugged |
| <input type="checkbox"/> cheerful | | | | |

Appendix 5: Survey (CONT.)

Which of the following personality types do you most strongly associate with?

- ☐ Extrovert
- ☐ Introvert

At a party do you:

- ☐ Interact with many, including strangers
- ☐ Interact with a few, known to you

At parties do you:

- ☐ Stay late, with increasing energy
- ☐ Leave early with decreased energy

In your social groups do you:

- ☐ Keep abreast of other's happenings
- ☐ Get behind on the news

In phoning do you:

- ☐ Rarely question that it will all be said
- ☐ Rehearse what you'll say

In company do you:

- ☐ Initiate conversation
- ☐ wait to be approached

Does new and non-routine interaction with others:

- ☐ stimulate and energize you
- ☐ tax your reserves

Appendix 5: Survey (CONT.)

Do you prefer:

- ☐ many friends with brief contact
- ☐ a few friends with more lengthy contact

Do you:

- ☐ speak easily and at length with strangers
- ☐ find little to say to strangers

When the phone rings do you:

- ☐ hasten to get to it first
- ☐ hope someone else will answer

Are you more inclined to be:

- ☐ easy to approach
- ☐ somewhat reserved

With which of the following genders do you predominately associate yourself?

- ☐ Male
- ☐ Female

Select your age range

- ☐ 18-20
- ☐ 21-24
- ☐ 25-28
- ☐ Above 29

Appendix 5: Survey (CONT.)

What racial or ethnic background do you consider yourself to be most associated with?

- ☐ Non-Hispanic White or Euro-American
- ☐ Black, Afro-Caribbean, or African American
- ☐ Latino or Hispanic American
- ☐ East Asian or Asian American
- ☐ South Asian or Indian American
- ☐ Middle Eastern or Arab American
- ☐ Native American or Alaskan Native
- ☐ Other

What is your current student classification?

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Masters
- ☐ Doctoral

Enter the brand name or names in the advertisements.

What product or products were the advertisements for?

If taking this survey for credit please provide your UT EID.

If taking this survey for credit please select your professor:

- ☐ Eastin
- ☐ Cunningham
- ☐ Thomas

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